## **The Smart Solution**



# SMR3300<sup>тм</sup> The Long Range Radio Smart Repeater

All Alarm Messages, even from the most distant alarm transmitter, are received by the Central Monitoring Station through the SMR3300<sup>TM</sup> repeater network. The SMR3300<sup>TM</sup> assures radio coverage to all of the subscribers in a Long Range Alarm Radio System. The SMR3300<sup>TM</sup> repeaters have various options and capabilities to suit any size, any terrain, and any customer.

### **Important Features:**

- Two Way Data Radio Smart Store & Forward Repeater
- Signal Strength Meter for easy, fast and efficient installation and maintenance
- Smart traffic control transmitting algorithm to avoid collisions / oscillations between repeaters
- Transmits signal strength measurement to the Central Station for higher level of technical control and maintenance (optional)
- Combination of VHF/UHF Systems in one unit (optional)
- Full range of various sizes repeaters from the small 'Gap filter' to the large double size dual bands repeater.



### The Building Blocks of the LARS<sup>TM</sup> Network

#### **Description:**

The SMR3300<sup>™</sup> - a programmable Smart Store & Forward Repeater with signal strength meter- is based on a transceiver, encoder/decoder module, switching power supply charger and backup battery.

An optional analog to digital module is available, that translates the signal strength information into digital messages and transmits it to the Central Monitoring Station. Any alarm message receive by the SMR3300<sup>TM</sup> is checked by the encoder/decoder module, and retransmitted, if the message was valid and if it belongs to the network. The SMR3300<sup>TM</sup> also transfers interrogation and acknowledgement messages to interrogatable alarm transceivers. In the LARS NET<sup>TM</sup> Configuration, where more then one SMR3300<sup>TM</sup> is used, a smart algorithm avoids retransmission of the same messages more than once by each repeater.

The signal strength meter and optional data transmission to Central Station are unique tools for alarm transmitters installations and maintenance, giving real-time technical information about each alarm transmitter status.



#### The Smart Unit for optimal Radio Coverage **SMR3300**<sup>TM</sup>

SMR3300SA<sup>TM</sup> SMR3300FTM SMR3300FA<sup>TM</sup>

SMR3300FUH™ SMR3300FUHA™

SMR3300FUHAD<sup>TM</sup>/ SMR3300FAD<sup>TM</sup>

The 'Gap -Filler' 5 Watt VHF unit 10/25/40 Watt VHF unit 10/25/40 Watt VHF unit with signal strength data 10/25/40 Watt UHF unit 10/25/40 Watt UHF unit with signal strength data Dual transceivers 25/40 Watt UHF/ VHF or a combination unit with signal strength data

Tel. 1-(888) 542-7460 Fax.(215) 542-461

Specifications:		
Models:	SMR3300SA	SMR3300F/SMR3300FUH
Power Supply Input Voltage	220 VAC/50 Hz or 110VAC/60 Hz	
AC Mains Current Consumption	0.4A on 220VAC supply, 0.8A on 110VAC supply	
Backup Batteries	12VDC 2.6 AH Lead Acid	12 VDC 2X7 Ah Lead Acid
RF Transmitter		
Frequency	136-174 MHz 403-502 MHz	
Modulation	FM/FSK/PWM/DFM	
Power Output	2/5 Watt	10/25/40/ Watt(programmable)
Frequency Setting	Synthesized	Synthesized 1
Frequency Stability	±5 PPM	
Operating Temperature	-30°C to +60°C (-23°Fto +140°F)	
Spurious & Harmonics	-50dB	-65dB
Deviation	2.2KHz for 12.5KHz Bands,	3.3KHz for25KHz Bands
Operating Voltage	10.5-14.5 VDC	
Standby Current Consumption	15mA 300mA	
Transmission Current	1 A max. 2/6	5/10 A max. depends on output power
Output Impedance	$50\Omega$ UHF Connector	
FM Receiver		
Sensitivity	0.4µV for 12dB SINAD	0.3µV for 12 dB SINAD
Selectivity	55dB at ±2.5KHz	75dB at ±12.5KHz
Digital Encoding/Decoding		
Encoding/Decoding	LARS I Format- 32 Bit Word with BCH & Parity	
Modulation	FSK, 900 & 1500 Hz	
Tx Format	Bursts of Words with Repetitions (No. of Words in a Burst	
Timeout Timer	Automatic, Limited to 12 Seconds	
Test message	Manual or Auto, single message	
AC Fail	Automatically Produced Message, with 5 Repetitions	
Direct Alarm Inputs	8	
	Less then $3K\Omega$ = Closed, more then $40K\Omega$ =Open or $12VAC$ =Open, $0VAC$ =Closed	
Parameters Selection	EEPROM Programming Option	
Weight (without Batteries)	10kg (22Lbs)	20kg (44Lbs)
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